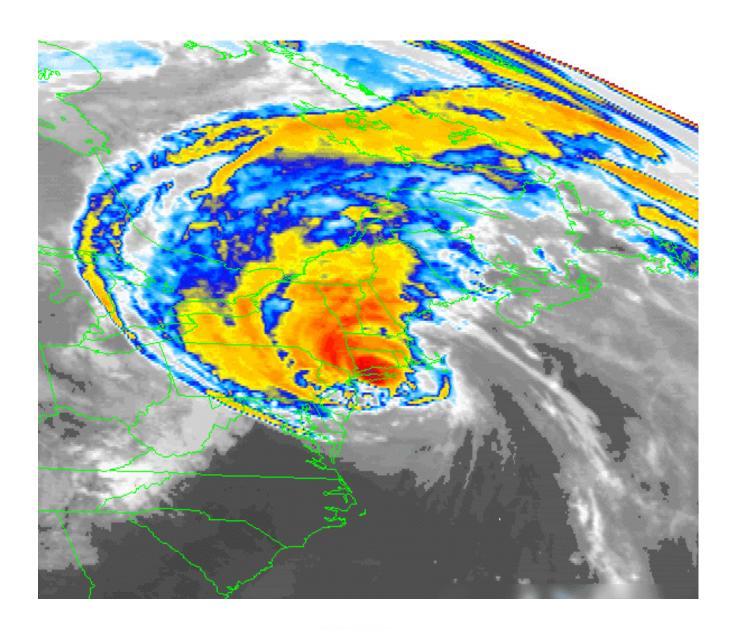
Hurricane and Severe Weather Preparedness Guide





Prepared by the 106 Rescue Wing April 2002

Hurricane and Severe Weather Survival Guide

Introduction

This guide provides disaster preparedness related information to save lives and reduce hardship. It provides individuals and families with information and guidance on what can and should be done to increase chances of survival in the event of a natural or man-made disaster. Disasters and emergencies affecting large areas and many people can either develop quickly or be preceded by a built-up period that provides more time for implementation of protective measures. For example, the path of a hurricane can be tracked for days and people in probable danger areas are notified before the storm strikes land. Individuals and families can prepare for any type of emergency using the guidance offered in this handbook as a foundation. Your survival depends on your actions and preparations.

Emergency Telephone Numbers (individual responsibility to fill in):
Ambulance
Doctors
Fire
Health Department
Hospitals
Police
Red Cross
Utility Companies
Other

In time of emergency, don't use the telephone to get information or advice, depend on radio or television

Thunderstorms and Lightning Strikes

Thunder is scary, but lightning is dangerous and can occur anywhere. If you can hear thunder, you are close enough to the storm to be struck by lightning. Take the following precautions whenever you are caught in an electrical storm:

- 1. Seek shelter immediately, buildings are your best choice, hardtop vehicles are okay. Convertibles, golf carts, and tractors are not safe and should never be used for shelter during an electrical storm.
- 2. If you are outdoors, avoid standing next to tall trees and poles. Take cover in a low-lying area with small trees or in a valley or ravine. If there is no cover, be as small a target as possible. Crouch with your hands on your knees and your head between them; do not lay flat on the ground.
- 3. Stay clear of water and metal. If you are boating, return to land as soon as possible. If you are golfing, stop your game and return to the clubhouse immediately. If swimming, get out of the water immediately. If at home, avoid the bath and the shower.
- 4. Do not use the telephone (unless there is an emergency). Telephone wires conduct electricity.
- 5. Turn off and unplug high priced electrical/electronic appliances, especially air conditioners, stereo equipment, televisions and computers.
- 6. Draw the blinds and move away from windows. High winds can blow debris through the windows; blinds and shades will provide you with some protection from shattered glass.
- 7. If someone is struck by lightning, administer first aid immediately. People struck by lightning do not hold an electrical charge, and may be handled safely. Victims of lightning strikes may show burned skin at the point where the charge entered and exited the body.
- 8. Last but not least, become familiar with the terminology used by weather forecasters.

Thunderstorm Terminology

Thunderstorm Watch: This advisory indicates that conditions are right for the formation of thunderstorms.

Thunderstorm Warning: This advisory indicates that a thunderstorm is in or will affect a specific area and that personnel should be aware of their surroundings.

Tornadoes

Tornadoes are one of nature's most violent and destructive storms and can devastate an area in seconds. A tornado appears as a rotating, funnel-shaped cloud, striking the ground with whirling winds with speeds of up to 300 MPH or more. A tornado spins like a top and may sound like a train or like the engines on an airplane. Tornadoes normally travel for up to 10 miles before they subside.

What to do before a Tornado Strikes:

- 1. Know the location of designated public shelters within your community and around your work area.
- 2. Ensure everyone in your home knows, in advance, where to go and what to do in case of a tornado (emergency assembly areas).
- 3. Inventory and maintain a database or listing of your household furnishings and valuable possessions. Keep this inventory, along with other valuable papers, in a safe place.
- 4. Learn the terminology used by the weather forecasters to describe tornado threats.

Tornado Terminology:

Tornado Watch: This advisory indicates that conditions are favorable for the formation of a tornado.

Tornado Warning: This advisory indicates that a tornado has been sighted in your area, and you should take protective actions.

What to do During a Tornado

- 1. Whenever severe thunderstorms threaten your area, listen to radio and television announcements for updates and instructions.
- 2. When a tornado has been sighted in your area (Tornado Warning) take cover immediately.
- 3. If you are in a house or small building, go to the interior part of the structure on the lower level (closet, interior hallway, or bathroom without windows). If these shelters are not available, seek shelter under something sturdy, such as heavy table or a desk and remain in place until the emergency is over.
- 4. In schools, nursing homes and shopping centers (malls) go to the pre-designated shelter area. Interior hallways on the lowest floor are the safest; avoid open spaces.
- 5. In multi-story buildings, go to small interior rooms or hallways on the lowest floor.

- 6. In a vehicle, mobile home or trailer, get out immediately and seek shelter in a building that offers better protection.
- 7. If there is no shelter nearby lay flat in the nearest ditch, ravine or culvert and protect your head with your hands.
- 8. DO NOT attempt to flee from a tornado in your car or any other type of vehicle. They are no match for the swift, erratic movement of the storm(s).

What to do After a Tornado

- 1. Use extreme caution when entering homes and facilities damaged by the storm.
- 2. Look for broken gas lines, downed power lines, and damaged utilities and report them to the proper authorities.
- 3. Check for injured personnel. Do not attempt to move people who are seriously injured, unless they are in immediate danger. Call for medical help immediately.
- 4. Stay away from disaster areas unless you are providing first aid or medical assistance.
- 5. Remain calm. This may be difficult, but remember that others may be looking at you for moral support.
- 6. Volunteer your skills and services when you can and be ready to begin recovery operations

Hurricanes

Hurricanes develop over warm waters (off the coast of Africa) and usually strike the coastal areas in the United States and the Caribbean Islands. The hurricane season runs from 1 June through 30 November. August and September are peak months for hurricane activity. Unlike tornadoes, hurricanes develop slowly, allowing you some time to prepare.

Hurricane Formation

- 1. A hurricane is an organized collection of thunderstorms that pumps warm air near the Earth, and exhausts it out the top.
- 2. Winds near the ocean surface spiral counterclockwise as they bring humid air into the storm from all directions.
- 3. The humid air rises, causing the moisture in it to condense, keeping the thunderstorms going.

- 4. Air blowing out the top of the storm forms high clouds that spread for hundreds of miles.
- 5. As the storm strengthens, some air begins sinking in the center forming the cloud-free "eye".

Factors Influencing Hurricane Formation

- 1. Low Level Convergence
- 2. Organized Convection
 - a. Easterly Wave
 - b. Tropical Cyclone
- 3. Ocean Temperature
 - a. Over 79° F
- 4. Weak Upper-Level Winds
 - a. Promote Convection
 - b. Concentrate Thermal Energy

Hurricane Terminology

National Hurricane Center Severity Scale

(Saffir/Simpson Scale)

CATEGORY	WIND SPEED	STORM SURGE
(Least Severe)	74 - 95 MPH	4 - 5 Feet
II	96 - 110 MPH	6 - 8 Feet
III	111 - 130 MPH	9 - 12 Feet
IV	131 - 155 MPH	13 - 18 Feet
V (Most Severe)	Over 155 MPH	Over 18 Feet

Hurricane Watch: This advisory indicates that conditions are favorable for the formation of a hurricane.

Hurricane Warning: This advisory indicates that the hurricane will affect a specific region or immediate area and you should begin preparations.

Before the Start of the Hurricane Season

- 1. Eliminate possible hazards around your home and work area. Trim dead wood from trees; repair loose shutters and gutters.
- 2. If possible stock up on plywood, nails, and other items needed to protect your windows during the storm.
- 3. Build and inspect a hurricane survival kit and re-supply as necessary. (See listing of suggested items on page 8).

- 4. Have your vehicle inspected and prepared for possible long trips in case of an evacuation order.
- 5. Locate homeowners insurance and other important papers and place in a central location.

As the Storm Approaches

- 1. Board or shutter your windows. Clear the deck, patio, and back yard of furniture, toys or any other item which can become a deadly projectile if carried by hurricane force winds.
- 2. Gather your survival kit and important papers (such as insurance papers, wills, marriage and birth certificates, telephone and address books, money, checkbook, etc.) and place them in a dry accessible place.
- 3. Ensure your vehicles have a full tank of gas; do not wait until the evacuation order is issued to do this.
- 4. Moor or secure your boat, if applicable.
- 5. Contact family and friends and inform them of where and with whom you will be staying during the storm.
- 6. If you are planning on using public (county) shelters, become familiar with the established travel routes to and from those shelters.
- 7. Stay tuned to television and radio for further updates and prepare family for possible evacuation.

If You Must Evacuate

- Evacuation procedures are simple. The checklists on the following pages will show what steps to take when preparing for a possible hurricane evacuation. Wing personnel are encouraged to stay with friends, family members or in hotels located outside the predicted flooding areas. If these options aren't available, you can use local (county) shelters as a last resort.
- 2. Obey the instructions of local authorities. Travel light, but carry essentials and valuables.
- 3. Load the hurricane survival kit and other supplies in your vehicle.
- 4. Leave your pet(s) in an approved animal shelter. Pets are not allowed in any of the local shelters (with the exception of seeing-eye dogs). Make these arrangements well ahead of time (prior to the beginning of hurricane season).
- 5. Remember to cooperate with local, state, and federal authorities, this will ensure that the entire evacuation process goes smoothly.

Recommended Items for A Hurricane Kit

- Bottled Water

- First Aid Kit

- Dry (Powder) Beverages

- Flashlight

- Battery Operated Radio

- Extra Batteries

- Non-perishable (can) Foods

- Baby Food

- Plastic Eating Utensils

- Bedding Material

- Toiletries

- Ear Phone For The Radio

- Magazines and Books

- Pillows

- Personal Hygiene Items

- Items For Young Kids

- Extra Work Clothing

- Playing Cards

- Cell Phone

- Medication

- Extra Cash

Preparing For the Storm

Advance planning and execution is the key to proper hurricane preparation and personal and property protection. The following information is to be used during the two or three days before the expected arrival of the storm.

- 1. Install shutters or precut covers on all windows to protect them from wind driven debris.
- Unplug and secure high-value electronics equipment. When lowering a television antenna, be very careful and do not touch power lines due to the risk of electrocution.
- 3. Fill your vehicle's fuel tank as soon as possible to avoid long lines at the gas station. Gasoline pumps do not work when electricity is out; therefore gasoline may not be available for days or weeks after the hurricane strikes.
- 4. Stay tuned to radio and television for the latest alert, warning and advisories.
- 5. If your house has a pool, ensure that it is prepared for the storm. Lower the water level to accommodate heavy rains (but do not drain completely), add extra chlorine to the pool and turn off electrical power to pool equipment.
- 6. Store water in bathtubs, barrels, jugs, and other containers. Use this water for bathing and sanitary purposes; **DO NOT USE THIS WATER FOR DRINKING.**
- 7. Ensure your hurricane survival kit is packed and ready to go at a moment's notice.

Hurricane Evacuation Checklists

It is recommended that families have 5 days worth of supplies in their hurricane survival kits, as well as other items listed below for use at a shelter and/or upon return to your home. The following actions are recommended:

STEP 1: Ensure your vehicle has a full tank of gasoline. Check tire pressure and inspect fluid levels

STEP 2: Obtain cash for emergencies (rolls of quarters and small bills for use in vending machines). Remember that most vendors will not be able to accept checks or credit cards after a hurricane.

STEP 3: Pack non-perishable food and water:

- a. Items that require no cooking.
- b. Are ready-to-eat.
- c. Include a can opener and plastic or disposable utensils.
- d. Include toiletries and enough shaving supplies for two weeks.

STEP 4: Pack important documents and papers:

- a. Birth/Marriage Certificates.
- b. Passports/Visas.
- c. Wills and Power Of Attorney.
- d. Computer Disks with valuable information and/or System Disks.
- e. Videotape of household goods and of the interior/exterior of the house.

STEP 5: Pack Clothing, Bedding, and Bathing Supplies:

- a. Pants Shirts, Underwear, Socks, Etc.
- b. Pillows Sheets and Blankets.
- c. Towels and Facecloths.

STEP 6: Inspect the house for loose external items:

- a. Trash Cans and Receptacles.
- b. Lawn and Patio Tables/Chairs.
- c. Toys (Swing Sets, Riding Toys, Etc.).
- d. Secure Television Antenna or Satellite Dish.
- e. Unplug Appliances (Televisions, Stereos, Computers, Etc.).
- f. Turn Off Gas and Electricity the House.

STEP 7: Take your pet to a designated shelter.

Hurricane Conditions (HURCONs)

HURCON 4 (72 Hours prior to the arrival of forecasted 50 knot winds)

Item	Action	Υ	Ν	N/A
1.	Is canned/non-perishable food and water on hand in enough quantities			
	for all family members? (5 Day Supply)			
2.	Do you have a 5-day supply of generic/prescription medication?			
3.	Are you staying informed of the hurricane's position/intensity and			
	expected landfall by watching television, or listening to the radio?			
4.	Are limiting telephone usage to essential calls only?			
5.	Have you checked the serviceability of the flashlight and spare batteries?			

HURCON 3 (48 Hours prior to the arrival of forecasted 50 knot winds)

Itomo	Action	V	N.I.	NI/A
Item	Action	Y	N	N/A
1.	Do you have handicapped or bed-ridden family members? Have you			
	contacted the hospital to arrange for special transportation needs?			
2.	Have you secured antennas, and cleared outside areas of yard furniture,			
	toys, BBQ grills and clotheslines?			
3.	Have you secured trailer-mounted boats and/or campers?			
4.	Have private aircraft been secured?			
5.	Have boats been checked for to ensure moorings are tight?			
6.	Have you made plans for family pets? (Kennels)			
7.	Do you have sufficient cash for evacuation costs/expenses?			
8.	Move valuable furniture away from windows to minimize water damage.			
9.	Set refrigerator to lowest setting and tape seals to minimize heat			
	penetration.			
10.	Have you contacted your next of kin outside the state to inform them on			
	your decision to evacuate or remain in your home?			
11.	Have you packed your hurricane survival kit and ensured you have			
	sufficient supplies for at least 5 days? See page for suggestions.			
12.	Check with your neighbors to see if they required any help or assistance.			

HURCON 2 (24 Hours prior to the arrival of forecasted 50 knot winds)

Item	Action	Υ	N	N/A
1.	Prepare your home as best as you can. Most of the damage will be			
	done by high winds; the rest will be due to flooding and wind-driven rain.			
2.	Once the hurricane arrives, do not attempt to flee the area. Remain in			
	your designated safe area in the innermost rooms in your home.			
3.	Do not expose yourself by leaving your safe area to retrieve or "save"			
	forgotten valuables or "to keep an eye" on your home. Any valuables			
	lost during the storm can be replaced, with one exception, your life.			
4.	If electrical power fails, use only flashlights or "chemlights". Never use			
	candles or kerosene lamps during the storm.			
5.	Never cook during the storm; a strong gust of wind can spread the flame			
	and start a fire. Fire departments will be unable to respond during storm.			

Personnel Conduct at Local Shelters

- 1. Because of the close-quarters environment, respect other evacuees' rights and recognize the need for cooperation.
- 2. No intoxicating beverages or illegal drugs are to be brought in to or consumed within the shelter or its premises. Weapons are also prohibited in the shelter.
- 3. The head of the household (or sponsor) is responsible for the conduct of all family members. Shelter living and operations will require close supervision.
- 4. Pets are not allowed in any local (county) shelters.
- 5. Do not leave your belongings and/or valuables unattended; shelter staff will not be responsible for lost, stolen or damaged property.

Post Hurricane /All Clear Operations

Keep abreast of the latest information through the local media. Pay attention to base recalls and other important information. When the "All Clear" is given:

- a. Remember that "All Clear" indicates that the emergency or storm is over; it does not mean that you are cleared to return to your home. You need to listen to local authorities for authorization to return to a specific area.
- b. Once you determine that you can go home, gather all your belongings, and clean the shelter area used.
- c. Consider procurement of needed supplies/food before returning home.
- d. When you return home, try to contact your organizational work center.
- e. Inform your next of kin of your return to home and how you are doing.
- f. Do not touch loose or dangling electrical wires. Do not turn the power on and report the wires to proper authorities.
- g. Beware of outdoor hazards (strayed animals, and other critters). Be alert for potholes, sinkholes, structural damage, etc.
- h. Do not drink city/tap water until official word comes that it is safe to do so.

 Use bottled water from the hurricane survival kit or purchase additional water.
- i. Guard against spoiled food. If there is any doubt, discard.
- j. Do not "sightsee." This only hampers recovery efforts.
- k. Report all unsafe conditions to the proper authorities.

The Time to Commence Hurricane Preparation is BEFORE the Storm Hits!

It is imperative that significant preplanning occurs for hurricane season. Planning ahead and being prepared for a hurricane are important factors that increase your chances of being fully compensated for your property loss. Securing important paperwork and legal documents, keeping both a written and photographic inventory and saving receipts for large purchases will make the claims process much easier.

First, prior to evacuating, you must ensure that you have your military ID cards, your dependents' ID cards and any other type of identification cards that you might need during evacuation, such as your driver's license, Tri-care cards, or credit cards.

You should also have a complete inventory of all of your household items. It is a good idea to have a photographic inventory of these items. You can keep these inventories in a three-ring binder or photo album and stored with other important documents for easy access. These inventories provide documentation and proof of ownership in the event you file a claim. For example, if you file a claim for a television or a stereo which was destroyed during a hurricane and no proof of purchase is available, a family Christmas picture with the television in the background is often sufficient proof of ownership.

NOTES